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Dragonflies and Damselflies of Albemarle County, Virginia (Odonata)

James M. Childress

4146 Blufton Mill Road Free Union, Virginia 22940

ABSTRACT

The Odonata fauna of Albemarle County, Virginia has been poorly documented, with approximately 20 species on record before this study. My observations from 2006 to 2014, along with historical and other recent records, now bring the total species count for the county to 95. This total includes 64 species of dragonflies, which represents 46% of the 138 species known to occur in Virginia, and 31 species of damselflies, which represents 55% of the 56 species known to occur in Virginia. Also recorded here are the observed date ranges for adults of each species and some observational notes.

Key words: Odonata, dragonfly, damselfly, Albemarle County, Virginia.

INTRODUCTION

For many counties in Virginia, there has been little effort to systematically survey the insect order Odonata (dragonflies and damselflies). As a resident of Albemarle County, I felt that I was in a position to make a sustained effort to remedy the virtual lack of information for this county. Prior to my survey, only about 20 species had been documented in this county (Kennedy, 1977; Carle, 1982; Roble, 1994; Roble et al., 1997; S. Roble, unpub. data). This annotated checklist is meant to bring together both my own observations of Odonata in Albemarle County, Virginia, and other reliable records.

STUDY AREA

Albemarle County (Fig. 1) is centrally located in the Commonwealth of Virginia, with Charlottesville being its largest city. The county lies within the Piedmont physiographic province, except for the northwestern border, where the Blue Ridge Mountains, Pasture Fence Mountain, and Bucks Elbow Mountain are in the Blue Ridge physiographic province. The highest point in the county is 990 m above sea level at the peak of Loft Mountain in the northwest corner. From the foot of the Blue Ridge eastward, the topography is typical of the Piedmont, with the elevation of the plateau generally between 150 and 200 m, trending lower toward the

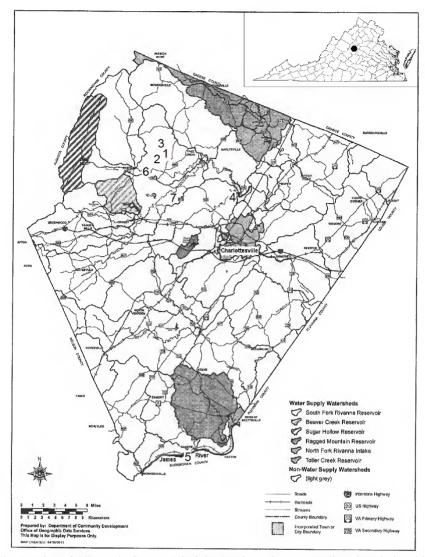


Fig. 1. Map of Albemarle County, Virginia showing primary sampling sites during this study: 1. Lowell pond; 2. Childress/Payne pond; 3. Chapel Springs Farm pond; 4. Ivy Creek Natural Area; 5. James River at Warren; 6. Moormans River; 7. Mechums River.

James River and the Fluvanna County line, where the elevation is about 75 m. There are several groups of outlying mountains, including Fox Mountain in the northwest and the Ragged Mountains south of Charlottesville, with elevations ranging from 365 to over 730 m. Southwestern Mountain lies just east of Charlottesville and runs from the northeast of the county toward the southwest, with the highest point being over 550 m. The county is a mix of urban and suburban development, farmland, and primary and secondary growth forests.

Albemarle County is drained primarily by the James River and three of its tributaries (Rockfish, Hardware, and Rivanna rivers) and the numerous smaller streams that feed them. The headwaters of the South Anna River (York River drainage) extend into this county over a mile near Barboursville. All of the tributaries of the James River flow in entrenched, meandering channels, which cross the structural trend of this area. Their drainage pattern has, in places, a well-defined trellis pattern, and in other places a poorly defined pattern of the same type (Nelson, 1962).

Albemarle County has no natural lakes, but there are many man-made impoundments, including the South Rivanna Reservoir, Sugar Hollow Reservoir, Beaver Dam Creek Reservoir, Totier Creek Reservoir, and Ragged Mountain Reservoir. There are also numerous private ponds, some with flooded forests and beaver activity, some full of cattails (*Typha* spp.), some surrounded by alders (*Alnus* spp.), and others standing

in pastures, their banks trampled by cattle.

Although I have surveyed many private ponds in Albemarle County, I have paid special attention to three of them (see Fig. 1) with somewhat different characteristics. The Chapel Springs Farm pond (38.15714° N, 78.61095° W) is fed by a branch of Rocky Creek. Where the creek enters the pond, there is a shallow swampy area with alders, grasses, rushes, and a few cattails. The pond itself has many water lilies (*Nymphaea* spp.). Along Blufton Mill Road, the Lowell pond (38.13886° N, 78.62161° W) is a small, somewhat overgrown pond that has many cattails in the shallows and is quite weedy around. The Childress/Payne pond (38.14942° N, 78.62161° W) was built in 2007, had no fish in the first season, and is less grown up than the others.

The Mechums and Moormans are small rivers that drain the western part of the county. The Moormans is somewhat rockier and the Mechums carries more sediment. These two join near Free Union to form the South Fork of the Rivanna River. These rivers, along with the much larger James River on the county's southern border, have received most of my focus for riverine habitat.

METHODS

With a few exceptions, my species records are based on identification of specimens that I have collected with a standard insect net (adults) or a D-shaped collecting net (larvae) and that have been verified by Steve Roble of the Virginia Natural Heritage Program. Adults have been preserved with acetone and larvae preserved in a 70% ethyl alcohol solution. I have attempted to collect adult specimens of every species, but there are several species for which I have only obtained larvae and/or exuviae. In one case (Libellula axilena), my only record is a photograph. I have also included historical and personal records for Albemarle County provided by Steve Roble.

In a few cases, I have raised larvae to adulthood in order to have more definitive identifications. Individual larvae were kept in screen enclosures set in two to three inches of water in a plastic tub with aeration. The larvae were able to crawl up the screen and out of the water when ready to emerge.

RESULTS

My observations from 2006 to 2013, along with historical and other recent records, bring the total Odonata species count for Albemarle County to 95. This total includes 64 species of dragonflies, which represents 46% of the 138 species known to occur

in Virginia, and 31 species of damselflies, which represents 55% of the 56 species known to occur in Virginia (S. Roble, unpub. data). The following annotated checklist is arranged alphabetically within families. Each species is listed with observation notes followed by the first and last observed flight dates for the county in parentheses and the nature of specimens collected: A (adult), L (larva), E (exuvia). Unless otherwise noted, specimens are in my personal collection.

ANISOPTERA (Dragonflies)

Petaluridae (Petaltails)

Tachopteryx thoreyi (Gray Petaltail)

I have seen this species along the wooded stream bottom of Rocky Creek on Chapel Springs Farm, hanging vertically on tree trunks, and on the gray wood siding of our house. Every day from 11-23 July 2004, I observed an adult hunting from the gray gravel of our driveway. I watched one on a tree branch eating a Lancet Clubtail (*Gomphus exilis*). The species is not common in the county, and I typically only see a few individuals each year, with my highest one-day count being five. (May 16 to July 23; A)

Aeshnidae (Darners)

Aeshna umbrosa (Shadow Darner)

Male Shadow Darners patrol shady, heavily vegetated, sluggish streams in the fall, and I have consistently seen them at the Lowell pond outlet stream and other slow shady streams, where females deposit eggs. I have also observed Shadow Darners flying abroad in open fields, and I saw a hunting swarm of several dozen on 5 September 2012. (September 5 to November 21; A)

Aeshna verticalis (Green-striped Darner)

I am only aware of one other Virginia record of this more northern species, and that was from Highland County (Roble et al., 2009). I captured an adult male on 21 October 2006 in tall grass near the Lowell pond. There is no evidence that this species breeds in the area; this individual was likely migrating or wandering late in the season. (October 21; A)

Anax junius (Common Green Darner)

This species is common at local ponds where the

males can be seen assertively patrolling the edges. Presumably due to its migratory habits, adults can be seen in late March before other species have emerged. From mid-September to early October it is common to see large numbers hawking insects. These are sometimes intermixed with Black Saddlebags (*Tramea lacerata*). In 2007, I observed a newly built pond, which was just filling up in mid-May. By July 14th there were exuviae on plant stems at the water's edge, indicating that individuals had completed their life cycle from egg to adult within two months. (March 17 to October 15; A, E)

Anax longipes (Comet Darner)

Comet Darners are somewhat uncommon but I have seen them patrolling several farm ponds in summer and have collected one larva. Males are aggressive and fly rapidly both along the shore and out over the open water. (May 16 to August 28; A, L)

Basiaeschna janata (Springtime Darner)

Springtime Darners patrol the edges of streams that range from a meter across to as large as the James River. I have sometimes seen them flying along the shores of farm ponds or flying along woodland paths away from water. I have also captured the larvae in streams both small and large and found an exuvia at the Childress/Payne Pond. (March 31 to June 7; A, L, E)

Boyeria vinosa (Fawn Darner)

This species is quite common in the late summer and fall on the Moormans and Mechums rivers where they fly close to the shady banks among the roots and snags, especially late in the day. I have also caught females out in the middle of streams over riffles. The larvae can be reliably found in the mud under river banks. Between 9 and 16 July 2009, I discovered three individuals trapped in netting that had been placed over blueberry bushes. These were far from any stream of the type in which they breed. (June 7 to October 10; A, L)

Epiaeschna heros (Swamp Darner)

I have seen Swamp Darners at Chapel Springs Farm pond, in woodland clearings, and in my own yard, but they were most commonly observed hawking over fields at Warren near the James River. Here the adults make rapid forays over the fields, often 2-7 m above the ground, with occasional rest periods in trees at the fields' edges. (May 21 to June 24; A, E)

Gomphaeschna antilope (Taper-tailed Darner)

Carle (1982) listed a male specimen in the collection of Virginia Commonwealth University that was collected by M. Zimmerman on 13 June 1975 in Charlottesville. I have not found this species or the closely related Harlequin Darner (*G. furcillata*) in Albemarle County. (June 13)

Nasiaeschna pentacantha (Cyrano Darner)

In Albemarle County, I have only seen this species at the Ivy Creek Natural Area, where the stream along the Red Trail meets the South Rivanna Reservoir. Males patrol back and forth above the sluggish shady stream, covering and recovering a 30 or 40 foot section of the creek. (July 7 to July 18; A)

Gomphidae (Clubtails)

Arigomphus villosipes (Unicorn Clubtail)

At Chapel Springs Farm Pond and a heavily vegetated temporary pond in a field at Warren, I have seen Unicorn Clubtails in late May and early June perching on lily pads or other vegetation growing in the water. I caught a fairly mature larva in the Chapel Springs Farm pond on 20 September 2008. (May 24 to July 4; A, L)

Dromogomphus spinosus (Black-shouldered Spinyleg)

Black-shouldered Spinylegs can be seen near streams and rivers of all sizes: tiny woodland streams, the Mechums, Moormans, and Rivanna Rivers, and the James River at Warren. They perch on the ground along the shores and also on plants and bushes. This is a common dragonfly and can be seen over a longer season than many of the other clubtails. (May 23 to September 9; A, L, E)

Erpetogomphus designatus (Eastern Ringtail)

This species is abundant in the summer on the James River, and can be seen in great numbers flying out over the water. Adults can also be found in forests and fields near the river. They are present on the Rivanna River and at the Ivy Creek Natural Area on the South Fork Reservoir. I have seen them upstream on the Moormans River nearly to the Free Union Road, but they are much less common on the smaller rivers than on the James. Larvae are relatively easily caught in silty places in the James River. (May 16 to September 9; A. L)

Gomphus abbreviatus (Spine-crowned Clubtail)

Spine-crowned Clubtails emerge from the James River at Warren in great numbers in mid- to late April, leaving exuviae on the banks and on roots and branches sticking out of the water. For a few weeks the adults can be seen in the grasses and bushes back from the water. I have seen them up the smaller rivers as far as the Millington Bridge on the Moormans River. (March 31 to June 4; A, L, E)

Gomphus dilatatus (Blackwater Clubtail)

This species is present in the James River at Warren where I collected a fairly mature larva on 7 October 2010 and have since collected adults in the spring and summer. Until recently, the range of this species was not considered to extend this far north (Roble, 2014). (June 7 to July 12; A, L)

Gomphus exilis (Lancet Clubtail)

Sitting on or near the ground, Lancet Clubtails are common near ponds and sluggish streams during their flight season. This is a widespread species in Albemarle County. (April 21 to July 8; A, L)

Gomphus lividus (Ashy Clubtail)

From mid-April through May, Ashy Clubtails are common both in vegetation near farm ponds and slow



Fig. 2. Adult female Rapids Clubtail (*Gomphus quadricolor*) from the Moormans River, Albemarle, County, Virginia.

streams, and sometimes far from water in grassy fields and yards. I observed one eating a small grasshopper in my yard. I have collected larvae in both ponds and slow streams. (March 31 to June 20; A, L, E)

Gomphus quadricolor (Rapids Clubtail)

I first found a Rapids Clubtail (Fig 2) in 2007 near the confluence of the Moormans and Mechums rivers. I have since found larvae in both of those rivers. On 24 May 2009, I observed a substantial emergence of adults along the Moormans River about halfway between Millington and White Hall. Dozens of tenerals were clinging to vegetation near the river and fluttering in the grass of a nearby field. Over the following several weeks I continued to find adults at that location and several miles downstream, generally in fields and low shrubs a short distance from the water. (May 24 to June 20; A, L)

Gomphus rogersi (Sable Clubtail)

I have collected larvae in the inlet stream to the Chapel Springs Farm pond (7 March 2009 and 27 March 2010) and an adult (25 May 2009) from a heavily shaded small stream that feeds into the Moormans River about halfway between Millington and White Hall. (May 25; A, L)

Gomphus vastus (Cobra Clubtail)

In early May, Cobra Clubtails emerge from the James River in very large numbers. They are very common at Warren, where they can be found in tall grasses and low in the trees. I have caught many larvae in the river there. (April 20 to July 13; A, L, E)

Gomphus viridifrons (Green-faced Clubtail)

In Virginia, this species is mostly known from the southwestern part of the state (Carle, 1982; Roble et al., 1997). I have collected both larvae and adults at the James River at Warren. There are also records east of Albemarle County along the James River as far downstream as the City of Richmond (S. Roble, unpub. data), so the James supports a population of this species east of the Blue Ridge Mountains. (May 3 to May 11; A, L)

Hagenius brevistylus (Dragonhunter)

I have seen Dragonhunters flying over the water and perching on rocks or on branches in streams and rivers ranging from the James, Rivanna, Moormans, and Mechums rivers, to the small inlet stream at the Chapel Springs Farm Pond. I generally see them singly, but they are widespread on rivers and streams. I watched one laying eggs on the pavement on East Jefferson Street in Charlottesville, presumably because the dark color of the street resembles a stream. The large flattened larvae are relatively easily found in half-rotted sticks and leaves at the bottom of streams as well as under rocks in swifter water. (May 28 to October 17; A, L, E)

Ophiogomphus incurvatus (Appalachian Snaketail)

My only record is a larva collected from the wooded inlet stream at Chapel Springs Farm pond on 14 February 2009. (L)

Ophiogomphus susbecha (St. Croix Snaketail)

A very small number of mature adults of this species have been captured in Virginia (S. Roble, pers. comm.), but exuviae are relatively easily found along the James River in April. In Albemarle County, I collected many fresh exuviae on the banks of the James River at Warren from March 31 to April 16. Steve Roble (pers. comm.) has also collected exuviae of this species along the James River at Warren as well as at Hattons Ferry and Scottsville. (E)

Progomphus obscurus (Common Sanddragon)

On sandy banks and sandbars in streams, from small woodland streams to the James River at Warren, this is a common species. On 25 May 2008, I found a number of exuviae on a sandy bank in the Moormans River and found one teneral that was just emerging. This is the earliest date on which I have observed them in the county. (May 25 to July 30; A, L, E)

Stylogomphus albistylus (Least Clubtail)

I have found adults and larvae along the Moormans River from its confluence with the Mechums River upstream to the dam at Sugar Hollow Reservoir, as well as on Jones Run. I have collected larvae from the James River at Warren. (June 1 to July 15; A, L)

Stylurus laurae (Laura's Clubtail)

On both 3 May 2011 and 11 May 2012, I collected one larva in the James River at Warren, about 50 m upstream from Ballinger Creek. The latter specimen emerged on 14 June. I captured a teneral female at the same location on 20 June 2013. (June 20; A, L)

Stylurus plagiatus (Russet-tipped Clubtail)

On 25 June 2008, Steve Roble (pers. comm.) observed one male on the North Fork of the Rivanna River, east of U.S. Route 29. (June 25)

Stylurus spiniceps (Arrow Clubtail)

I have not observed adults, but have collected many larvae from the James River at Warren. Roble et al. (1997) found this species along the Mechums River near Owensville on 18 October 1993. On 19 October 2006, Steve Roble (pers. comm.) observed several *Stylurus* males along the Rivanna River near Shadwell that were probably *S. spiniceps.* (October 18; L)

Cordulegastridae (Spiketails)

Cordulegaster bilineata (Brown Spiketail)

I have captured this species in a shallow, weedy part of the inlet stream to the Chapel Springs Farm pond and in the marshy area at the outlet of the Lowell pond. At the Chapel Springs inlet stream, the male perched repeatedly on one of several plants from which it made short flights. (April 21 to June 3; A)

Cordulegaster erronea (Tiger Spiketail)

While crossing a small, sandy bottomed woodland stream (<1 m wide) that leads eventually into Chapel Springs Farm pond, I captured a Tiger Spiketail that was flying rapidly along the stream. Since that time I have caught larvae in that stream and in similar streams in the immediate vicinity. (July 23; A, L)

Cordulegaster maculata (Twin-spotted Spiketail)

This is the common Spiketail in Albemarle County. I have found them along the edges of woodlands, on bushes in my yard, on woodland paths, and in a swampy area below the Lowell pond (newly emerged on a cattail stalk). The larvae are fairly easily found in small sandy-bottomed woodland streams, in the smaller ones sometimes in conjunction with *C. erronea*. (April 7 to May 29; A, L, E)

Macromiidae (Cruisers)

Didymops transversa (Stream Cruiser)

This common early spring species cruises back and forth along the banks of small streams (Chapel Springs Farm pond inlet stream) and large rivers (James River

at Warren). It shares both habitat and season with the Springtime Darner. I observed a teneral emerging on a stalk of grass on the edge of the Childress/Payne pond. (April 7 to June 4; A, L, E)

Macromia illinoiensis (Swift River Cruiser)

I have seen adults of this species on medium (Moormans and Mechums) and large rivers (James) where they cruise rapidly up and down the river. In between these patrols, they appear to perch high in the trees. I have also found the larvae in smaller streams, including the inlet to Chapel Springs Farm pond. I have occasionally seen adults cruising along roadways as though those roadways were streams and have seen them far from water patrolling grassy areas. I have occasionally seen one along the shores of a farm pond. (May 24 to September 9; A, L)

Corduliidae (Emeralds)

Epitheca cynosura (Common Baskettail)

Common Baskettails are abundant at farm ponds and creeks in the spring, where males defend territories along the banks. They are also common in yards and gardens away from water. (March 24 to June 20; A, L, E)

Epitheca princeps (Prince Baskettail)

Most farm ponds seem to have one male patrolling out over the water, often far from the shore. They are fairly common on the Moormans, Mechums, and Rivanna Rivers, and quite common on the James River. Larvae are easily netted in silty deposits in the James River. (April 30 to August 28; A, L, E)

Helocordulia selysii (Sely's Sundragon)

I captured an adult female along Preddy Creek at Gilbert. It was perched on a twig close to the ground in the Box Elder (*Acer negundo*) lowland woods. (April 27; A)

Helocordulia uhleri (Uhler's Sundragon)

I have seen a few individuals of this species most years at the inlet stream leading to Chapel Springs Farm Pond. The stream is wooded and fairly shady at that point. Males patrol rapidly and erratically. I have also captured an adult along a sunny driveway far from water. Not easily captured, this dragonfly is both wary and quick. (April 15 to May 14; A)

Neurocordulia virginiensis (Cinnamon Shadowdragon)

Although I expected to find several species of this genus, after spending considerable time and effort in late May and early June in the James River at Warren, all of the larvae, exuviae, and adults that I have collected are *N. virginiensis*. The adults fly out over the river from about 1830 h until dark, with the greatest activity about 45 minutes before dark. (May 24 to June 14: A. L. E)

Libellulidae (Skimmers)

Celithemis elisa (Calico Pennant)

This abundant species can be seen in farm ponds and grassy fields throughout the county. (May 2 to September 23; A, L, E)

Celithemis eponina (Halloween Pennant)

Halloween Pennants are commonly seen at farm ponds and nearby fields in late summer and early fall. I have also seen them on the South Rivanna Reservoir and James River. Pairs fly in tandem low over the water as the female lays eggs. I have observed a Largemouth Bass (*Micropterus salmoides*) capture a pair as they touched the water. (July 7 to October 10; A)

Celithemis fasciata (Banded Pennant)

This species (Fig, 3) is less common than *C. elisa*, but still fairly easily found at farm ponds. (May 14 to October 6; A)

Celithemis verna (Double-ringed Pennant)

This pennant is somewhat uncommon in Albemarle County, but can be found at ponds, usually sitting



Fig. 3. Adult male Banded Pennant (*Celithemis fasciata*) from the Childress/Payne pond, Albemarle, County, Virginia.

on the rushes farthest from the shore. Their flight is much quicker than the other *Celithemis* species, and they tend to dart quickly from their perches to grab prey and then return. I have seen them at the Childress/Payne pond, Lowell pond, and Chapel Springs Farm pond, but never in large numbers. (June 5 to July 15; A)

Dythemis velox (Swift Setwing)

My only record of this species in Albemarle County is an adult captured on 7 July 2007 at the Ivy Creek Natural Area. It was perching on a dead alder branch out over the reservoir and returned repeatedly to that same spot between forays. This is a southern species with only a handful of records in the state (Bedell & Chazal, 1999; S. Roble, pers. comm.). (July 7; A)

Erythemis simplicicollis (Eastern Pondhawk)

This common dragonfly is routinely found at ponds and still water where it perches in vegetation near and in the water. It is an aggressive predator, and I have observed one eating an Eastern Amberwing (*Perithemis tenera*). (April 21 to October 6; A, L)

Erythrodiplax minuscula (Little Blue Dragonlet)

I have seen this species only twice in the county, both times at the Childress/Payne pond, perched in low vegetation near the water. (July 20 to September 15; A)

Ladona deplanata (Blue Corporal)

In the early spring, this is an abundant species near ponds and lakes, where it tends to sit on or near the ground, with wings often held slightly downward. The larvae are easily found around pond edges. (April 7 to June 20; A, L, E)

Libellula auripennis (Golden-winged Skimmer)

My only location for this species in the county is the Childress/Payne pond, where it has been regularly seen for several years in fairly small numbers. (June 5 to June 30; A)

Libellula axilena (Bar-winged Skimmer)

On 18 June 2006, I observed a Bar-winged Skimmer return many times to the branches of a dead tree lying in the water at the Chapel Springs pond inlet stream. It was noticeably wary and I was unable to capture it. (June 18; photograph)

Libellula cyanea (Spangled Skimmer)

This beautiful skimmer is common in marshy areas and around ponds. It is particularly common at Chapel Springs Farm pond, which has a large marshy area at the upper end of the pond. Pam Hunt (pers. comm.) found a teneral female in Charlottesville on the rather early date of 23 April 2007. (April 23 to August 15; A)

Libellula incesta (Slaty Skimmer)

This skimmer is widespread and abundant at farm ponds, reservoirs and lakes, and the vegetation around the shores is crowded with them. The larvae are easily captured in the shallow waters. (May 31 to October 6; A, L)

Libellula luctuosa (Widow Skimmer)

This familiar dragonfly of summer is very common near ponds and lakes throughout the county. Females are common in fields away from the water. (May 24 to October 14; A, L)

Libellula pulchella (Twelve-spotted Skimmer)

Twelve-spotted Skimmers are present in the county from early May to late September at a variety of farm ponds, but I only see them occasionally, and then generally only one or two at a time. (May 2 to September 29; A, L)

Libellula semifasciata (Painted Skimmer)

I have only seen this very distinctive species twice in Albemarle County, and was able to collect an adult at the Childress/Payne pond as it perched in the reeds at the pond's edge. (May 9 to May 25; A)

Libellula vibrans (Great Blue Skimmer)

I have occasionally seen this species near the Chapel Springs Farm pond and more often near the James River at Warren. Based on my observations, it is somewhat uncommon in Albemarle County. (June 3 to August 16; A)

Pachydiplax longipennis (Blue Dasher)

In the vegetation at the edge of ponds, lakes, and slow streams, this species is abundant and widespread in the county. Males aggressively confront intruders. (May 15 to October 14; A, L)

Pantala flavescens (Wandering Glider)

I have seen this wide-ranging dragonfly in hayfields, parking lots, and over athletic fields and roads. They breed in the Childress/Payne farm pond, and I have found the exuviae on plants at the pond's edge and tenerals flying weakly in the grass near the pond. (June 21 to October 7; A, E)

Pantala hymenaea (Spot-winged Glider)

My observations indicate that this species is less common than *P. flavescens* in Albemarle County, but it also breeds in the Childress/Payne farm pond. (July 18 to August 7; A)

Perithemis tenera (Eastern Amberwing)

Perching on low vegetation in the water and flying forays just above the surface of the water, the Eastern Amberwing can reliably be found on ponds and lakes throughout the county. I have also seen them congregating in shrubs near the education center at the Ivy Creek Natural Area, hundreds of meters from the water. I observed one being eaten by an Eastern Pondhawk (*Erythemis simplicollis*). (June 4 to September 16; A)

Plathemis lydia (Common Whitetail)

Due to its abundance, extremely broad distribution, and habit of perching on or near the ground, this is the dragonfly most often seen by the layperson. I have observed them perching in yards, woods, and all around ponds and lakes. (April 14 to September 16; A, L)

Sympetrum ambiguum (Blue-faced Meadowhawk)

Carle (1982) listed two male specimens in the collection of Virginia Tech that were captured by Mary E. Davis on 1 September 1937 in Charlottesville. I have not encountered this species in the county.

Sympetrum vicinum (Yellow-legged Meadowhawk)

In 2011, I began seeing adults at the Childress/ Payne pond on June 26, with all of them appearing to be females. They were not present in large numbers but could consistently be found throughout the rest of the summer. As other common species die out in the fall, this becomes the most common dragonfly on farm ponds around the county, persisting quite late in the season. During a mild fall, I found a live adult on 23 December 2006 at Chapel Springs Farm pond. (June 25 to December 23: A)

Tramea carolina (Carolina Saddlebags)

Although not seen in large numbers, this species is fairly widespread on ponds and lakes where it flies a few feet above the water and along the shores. (April 26 to August 28; A, L)

Tramea lacerata (Black Saddlebags)

This is the more common of the two *Tramea* species found in Albemarle County, being reliably seen at ponds and lakes. It also congregates with Common Green Darners (*Anax junius*) in September in what appear to be migrating groups, hawking over open fields. (May 11 to October 15; A)

ZYGOPTERA (Damselflies)

Calopterygidae (Broad-winged Damsels)

Calopteryx angustipennis (Appalachian Jewelwing)

Ballinger Creek flows into the James River at Warren, and I have observed Appalachian Jewelwings along that shady, sandy, slow-flowing stream. I have also found them along the banks of the James near Ballinger Creek. (April 27 to June 7; A)

Calopteryx dimidiata (Sparkling Jewelwing)

My only Albemarle County record of this species is an adult captured on 6 June 2010 at Warren sitting on a branch overhanging the James River at dusk. Steve Roble (pers. comm.) found this species on 25 June 2008 along the North Fork of the Rivanna River just east of U.S. Route 29. (June 6 to June 25; A)

Calopteryx maculata (Ebony Jewelwing)

This is our most common Jewelwing and is found along the banks of shady woodland streams throughout the county. These streams include the smallest forest trickles as well as the James River. (April 27 to August 23; A, L)

Hetaerina americana (American Rubyspot)

The American Rubyspot is found along the Moormans, Mechums, and Rivanna rivers, but is particularly abundant on the James River. Groups of them congregate around plants growing in sandy

shallow places in the water. (May 11 to October 7; A, L)

Hetaerina titia (Smoky Rubyspot)

This species is found in the same locations and habitat as *H. americana*, although it is much less common than that species. I associate it more with willows and other tree branches overhanging the water than with plants growing in the water. (June 12 to October 7; A)

Lestidae (Spread-winged Damsels)

Archilestes grandis (Great Spreadwing)

Kennedy (1977) reported that the first Virginia specimen of this primarily western species was collected in Charlottesville in October 1947. I have seen this damselfly at the Lowell Pond outlet stream, which is a typical spreadwing habitat. I have also captured it flying purposefully along Blufton Mill Road, far from any water. Those are my only two records of this species in the county. (September 30 to October 19; A)

Lestes australis (Southern Spreadwing)

I have found adults in a shallow overgrown temporary pond at Warren, several hundred meters from the James River. They generally perched on vegetation growing out of the water. (April 19 to May 24; A)

Lestes eurinus (Amber-winged Spreadwing)

The year that the Childress/Payne pond was constructed, Amber-winged Spreadwings were abundant there. Fish were introduced the next season and few of these damselflies were present. As the fish multiplied in subsequent years, this species is now only occasionally seen there. Amber-winged Spreadwings are aggressive predators of smaller damselflies, and I have observed them eating Orange Bluets (*Enallagma signatum*) and Fragile Forktails (*Ischnura posita*). (June 8 to July 14; A)

Lestes rectangularis (Slender Spreadwing)

My records for this species are from the Ivy Creek Natural Area, in a small marshy area just off the Red Trail, from the Childress/Payne pond, and also from the James River at Warren. (June 4 to August 25; A) Lestes vigilax (Swamp Spreadwing)

In Albemarle County, this is the most common Spreadwing. It can be commonly found in dense vegetation at the edges of farm ponds, and I have seen many of them in the wet woods at Gilbert Crossing. They are most common in the late summer, but adults can be seen in May. (May 17 to October 10; A)

Coenagrionidae (Narrow-winged Damsels)

Amphiagrion saucium (Eastern Red Damsel)

Reported by Roble (1994) from Albemarle County on the basis of a specimen collected by Richard Hoffman in May 1948 in Charlottesville (S. Roble, pers. comm.). I have not encountered this species in the county.

Argia apicalis (Blue-fronted Dancer)

This species is found along the banks of the Moormans, Mechums, Rivanna, and James rivers. I have seen females in forests above the South Rivanna Reservoir at the Ivy Creek Natural Area. (May 16 to July 28; A)

Argia fumipennis violacea (Violet Dancer)

From May to October this is a common and widespread species, typically found in vegetation around ponds and slow-moving streams. (May 15 to October 3; A)

Argia moesta (Powdered Dancer)

Sitting on rocks in streams and rivers of all sizes, Powdered Dancers are quite common around flowing water. I have occasionally seen them at farm ponds, including the Lowell pond and the Childress/Payne pond. (May 16 to September 23; A, L)

Argia sedula (Blue-ringed Dancer)

In overhanging plants along the Moormans, Mechums, Rivanna, and James rivers, this damselfly is widespread. (June 7 to September 22; A)

Argia tibialis (Blue-tipped Dancer)

I have seen Blue-tipped Dancers on both the Moormans and James rivers. They are not as common in the county as some of the other *Argia* species. (June 7 to July 14; A)

Argia translata (Dusky Dancer)

This is another river species found on the Moormans, Mechums, and Rivanna rivers, typically in vegetation in or near the water. (May 25 to August 26; A)

Enallagma aspersum (Azure Bluet)

I have seen Azure Bluets at both the Lowell pond and the Childress/Payne pond, but they were particularly abundant at the latter pond before fish were first introduced. They appeared in large numbers shortly after that pond was built, but as the fish have become established, their numbers have become much reduced. (April 21 to September 23; A)

Enallagma basidens (Double-striped Bluet)

From early May until October, this bluet is widely found at farm ponds, including Chapel Springs Farm pond, Childress/Payne pond, and the Lowell pond. (May 2 to October 14; A)

Enallagma civile (Familiar Bluet)

From late May through the summer I see Familiar Bluets around the edges of farm ponds. Their numbers seem greater by September and this is the latest damselfly that I have observed in the fall. (May 24 to November 21; A)

Enallagma daeckii (Attenuated Bluet)

I have collected this species at the Lowell pond and seen it there one other time. This is the most inland record known in Virginia (Lam, 2004; S. Roble, pers. comm.). (June 5 to July 15; A)

Enallagma divagans (Turquoise Bluet)

In May and June I see this species around farm ponds and in the slow-moving inlet stream at the top of Chapel Springs Farm pond. (May 6 to June 10; A)

Enallagma exsulans (Stream Bluet)

As well as on the Moormans, Mechums, and James rivers, I have seen this common bluet on farm ponds. (May 24 to September 3; A)

Enallagma geminatum (Skimming Bluet)

This is a common farm pond bluet, typically found close to the water, on or near emergent vegetation. (May 2 to September 17; A)

Enallagma signatum (Orange Bluet)

Common at farm ponds over a relatively long season, I often see Orange Bluets holding onto grasses or rushes just above the water, with their bodies held horizontal like a pennant extended from a pole. (April 21 to October 14; A)

Enallagma traviatum traviatum (Slender Bluet)

This is another common denizen of farm ponds in the county. (May 25 to July 12; A)

Enallagma vesperum (Vesper Bluet)

I have seen Vesper Bluets at both the Lowell pond and the Childress/Payne pond at around dusk. They typically alight on floating mats of pondweed out in the water, but I also captured a mating pair in a small tree on the shore. (May 22 to September 15; A)

Ischnura hastata (Citrine Forktail)

I only see this damselfly occasionally, and it tends to be somewhat inconspicuous, low in heavy vegetation in damp places around farm ponds, including the Lowell pond, Childress/Payne pond, and Chapel Springs Farm pond. (April 21 to September 16; A)

Ischnura kellicotti (Lilypad Forktail)

My only record is of several adults perched on lily pads at Chapel Springs Farm pond. (May 30; A)

Ischnura posita (Fragile Forktail)

This is by far the most common of the forktails in Albemarle County. It is likely to be found low in heavy vegetation near any body of water. It is abroad from spring through fall. (March 22 to October 19; A)

Ischnura verticalis (Eastern Forktail)

Much less common than the Fragile Forktail, this damselfly can often be found at farm ponds in similar habitat. (March 24 to November 8; A)

DISCUSSION

Understanding of the distribution of Odonata species in Virginia has come from a combination of somewhat spotty data and educated extrapolation of that data. This paper combines the known historical records with new observations to present a more complete and systematic record for Albemarle County, showing that nearly half of the Virginia Odonata fauna occurs in this county.

It is likely that additional species are present in the county but yet to be documented. Some of the possible species to be discovered include Gomphaeschna furcillata (Harlequin Darner), Boyeria grafiana (Ocellated Darner), Gomphus lineatifrons (Splendid Clubtail), Lanthus vernalis (Southern Pygmy Clubtail), Stylurus amnicola (Riverine Clubtail), Ophiogomphus rupinsulensis (Rusty Snaketail), Cordulegaster obliqua (Arrowhead Spiketail), Somatochlora linearis (Mocha Emerald). Neurocordulia obsoleta (Umber Shadowdragon), Libellula (Yellow-sided flavida Skimmer), Sympetrum rubicundulum (Ruby Meadowhawk), Lestes congener (Spotted Spreadwing), Lestes forcipatus (Sweetflag Spreadwing), Argia bipunctulata (Seepage Dancer), Chromagrion conditum (Aurora Damsel), and Nehalennia integricollis (Southern Sprite). Locations especially worthy of further study include farm ponds in the southeastern portion of the county that might be at the western range limit for some species, mountain streams like Jones Run and the North and South Forks of the Moormans River, and both forested and open seepage areas. I believe there are additional species to be found in and around the James River.

There remains a large opportunity for naturalists around the state to make a significant contribution to our knowledge of Odonata distribution. It is important to both document this information and to make it available to others so that we can advance our collective knowledge of these remarkable animals.

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